Amendment

The Claims

1. (currently amended) A bacterial strain for production of ~~a fermentation product selected from the group consisting of antibiotics, organic acids, amino acids, proteins, vitamins,~~ polyhydroxyalkanoates, ~~and polysaccharides,~~ wherein the bacterial strain is genetically modified ~~to express~~ a by integration of a heterologous nuclease gene ~~or mutated to improve the activity of a homologous or heterologous nuclease gene,~~ wherein the nuclease gene product is expressed and the nuclease is secreted into the periplasmic space or culture medium in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours ~~and~~ to reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l and containing at least 40% polyhydroxyalkanoate by dry cell weight, so that recovery of the ~~product~~ polyhydroxyalkanoate is enhanced.

2-3. (cancelled)

4. (previously presented) The bacterial strain of claim 1 for use in an aqueous process to manufacture poly(3-hydroxyalkanoates) granule suspension which is essentially free of nucleic acids.

5-6. (cancelled)

7. (currently amended) ~~The bacterial strain of claim 1 in which~~ A bacterial strain for production of polyhydroxyalkanoates, wherein the bacterial strain is genetically modified by integration of a heterologous nuclease gene, wherein the nuclease gene product is expressed and the nuclease is secreted into the periplasmic space or culture medium in an amount effective to

degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and to reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l, so that recovery of the polyhydroxyalkanoate is enhanced, wherein the nuclease gene is integrated into a ~~host strain~~ bacteria selected from the group consisting of *Ralstonia eutropha, Methylobacterium organophilum, Methylobacterium extorquens, Aeromonas caviae, Azotobacter vinelandii, Alcaligenes latus, Pseudomonas oleovorans, Pseudomonas fluorescens, Pseudomonas putida, Pseudomonas aeruginosa, Pseudomonas acidophila, Pseudomonas resinovorans, Escherichia coli,* and *Klebsiella.*

8-10. (cancelled)

11. (withdrawn – currently amended) A fermentation process comprising

adding to a growth medium a bacterial strain for production of ~~a fermentation product selected from the group consisting of antibiotics, organic acids, amino acids, proteins, vitamins,~~ polyhydroxyalkanoates, ~~and polysaccharides,~~ wherein the bacterial strain is genetically modified to ~~express~~ integrate a heterologous nuclease gene, wherein the nuclease gene is expressed and the nuclease ~~product~~ is secreted into the periplasmic space or culture medium in an amount effective to degrade at least 95% of all of the nucleic acid released following lysis of the cells in less than 24 hours and reduce the viscosity of a cell lysate in a bacterial cell culture having a density of at least 50 g/l so that recovery of the ~~product~~ polyhydroxyalkanoate is enhanced.

12. (withdrawn) The method of claim 11 wherein the bacterial strain is grown to cell densities of at least 50 g/l.

13. (cancelled)

14. (withdrawn) The method of claim 13 further comprising growing the bacterial strain to produce levels of at least 40% of its dry cell weight.

15. (withdrawn) The method of claim 11 further comprising lysing the cells.

16. (withdrawn) The method of claim 14 further comprising using an aqueous process to manufacture a poly(3-hydroxyalkanoates) granule suspension which is essentially free of nucleic acids.

17-23. (cancelled)